## **CENWS-OD-EM**

## MEMORANDUM FOR RECORD

SUBJECT: Rehabilitation of Flood Control Works, Bertrand Creek Levees, Whatcom County, Washington – Finding of No Significant Impact

- 1. Background. The Nooksack River stream gage near Ferndale (nearest stream gage to site) experienced a 12-year-recurrence-interval flood event on 26 November 2004. This levee suffered significant damage, with breaches in multiple locations on the right bank, totaling 1500 feet in length. The project will be constructed under the authority of Public Law 84-99 (33 USCA 701n) with Whatcom County acting as the project local sponsor. The levees protect 1,790 acres of agricultural land, residential properties, and associated public infrastructure (such as roads). The project is located at River Mile 12.5 of the Nooksack River near Ferndale, Whatcom County, Washington.
- 2. Purpose and Need. The purpose of this project is to provide protection to the community and infrastructure from flood damage. This section of the levee sustained significant damage and is in need of permanent repair. There is an imminent threat of damage to life and property during the upcoming flood season if a permanent repair is not completed.

## 3. Alternatives Considered.

- **a. No Action.** The no-action alternative would leave the levees in their currently damaged condition with no further action to repair the damage. This alternative was rejected because of the high potential of additional flood damages to the surrounding area. In addition, the damaged levees increase the potential for further introduction of sediments to the already heavily silted creek system.
- **b.** Repair to Pre-Flood Condition. This alternative would repair the erosion and return the levee to its pre-flood condition. This alternative would provide the lowest-cost solution but the least amount of environmental benefits. The sponsor desires to provide environmental restoration in addition to maintaining flood protection; therefore, this alternative was discarded as insufficient in meeting the sponsor's goals.
- **c. Non-Structural Alternative**. The non-structural alternative would be to buy-out the existing farmland and provide for any necessary relocation. This alternative was discarded and eliminated from further consideration because the local sponsor is unable to afford the purchase and relocation costs and the local landowners do not wish to sell their property.
- **d. Preferred Alternative.** The Seattle District, U.S. Army Corps of Engineers (Corps) proposes to remove damaged sections of the right and left bank of the Bertrand Creek levees and construct new setback levees. Construction is scheduled to take place during August-October 2006. All work will occur above the ordinary high water mark with the exception of the

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replacement of two existing flap-gated culverts. Any work on these culverts will occur in the designated, allowable work period for in water work and work will be accomplished when no water is present in the ditch. Additional work includes removal of an existing agricultural bridge and relocation of a 6-inch irrigation pipe under Bertrand Creek. The bridge is an old railroad flatcar supported by concrete ecology blocks on either side of the creek. The bridge will be lifted off the blocks and disposed of elsewhere on the landowner's property (per the landowner's request). The irrigation pipe will be routed under Bertrand Creek through a directionally drilled casing several feet below the scour depth of the creek.

- 4. Summary of Impacts. The primary negative impacts of the preferred alternative will be the temporary and localized increase in noise in the construction area, as well as the removal of native shrubs and small trees in association with new levee construction. Long-term benefits will include restored flood protection while allowing for a larger flood plain and restoration of riparian habitat (the latter to be done by local entities). Best Management Practices for noise, air quality, and erosion control will be utilized to minimize temporary impacts during the construction period.
- a. The enclosed environmental assessment provides an evaluation of the levee rehabilitation project and its effects on the existing environment. All environmental permits and coordination efforts, including Endangered Species Act and National Historic Preservation Act consultations, have been satisfactorily completed.
- b. No significant adverse impacts to fish and wildlife habitat, air quality, esthetics, historical resources, cultural resources, listed or proposed endangered or threatened species, or the social or economic environment are anticipated as a result of the project.
- 5. Finding. For the reasons described above, I have determined that the levee rehabilitation project will not result in significant adverse environmental impacts. The project does not constitute a major Federal action with significant impacts on the environment and, therefore, does not require an environmental impact statement.

Encl

MICHAEL McCORMICK Colonel, Corps of Engineers

Commanding